

Managing Learning and Knowledge Translation in Cross Border Supplier Relationships:

The Case of 5 Danish Firms in the Fashion Industry

Work-in-Progress Paper

Cynthia Winther
Copenhagen Business School
Center for Applied Market Science (CAMS)
Birk Centerpark 40, 7400 Herning
Denmark
E-mail: cw.marktg@cbs.dk

ABSTRACT

Apparel is a huge global industry, embracing world exports worth US\$ 165.5 billion, and its influential presence is felt almost all over the world in one way or the other. The industry have for a long time been characterized by low entry barriers and fierce competition on quality, price, productivity and lead times. These challenges are accelerated by the great pressure for cost reduction due to globalization, greater demand for performance from customers; and a greater need to integrate and exploit supply base technologies and capabilities.

Evidently, the process of globalisation and technological developments has caused increased inter-firm cooperation in terms of domestic and offshore sourcing. These changes in the Fashion industry have resulted in a functional restructuring where the earlier division between producers, wholesalers and retailers tend to disappear in the fashion trend-setting and high-value end of the market. Thus, the integrative nature of this new set of demands will require a different set of abilities, as well as concentration on process and value adding activities of the firms.

This paper focuses on the management rather than the antecedents of buyer-supplier relationships. The intention is to focus on relationship competence development on economic globalization, in the analysis of which the 5 Danish firms is regarded as interesting case. It is the ambition of this paper to contribute to the generation of knowledge about how firms can integrate knowledge creation and learning in cross border supplier relationships. It is assumed that such knowledge will contribute to business' ability to adapt to continuously changing demands, technological developments and competitive pressures, as it provides a particular context, opportunities and restraints to support the firms' strategy development. More precisely, it is the objective to develop a method to empirically operationalise a process of learning and knowledge translation in managing cross border supplier relationships. The framework of analysis will rest on network, learning and knowledge perspectives.

Keywords: Relationship Competence, Inter-firm Learning, Knowledge Translation, Strategic Cooperation

Introduction

The Fashion industry have for a long time been characterized by low entry barriers and fierce competition on quality, price, productivity and lead times. These challenges are accelerated by the great pressure for cost reduction due to globalization, greater demand for performance from customers; and a greater need to integrate and exploit supply base technologies and capabilities. The volatility of fashion markets are characterized by short product life cycles, high demand unpredictability, the high impulse nature of fashion purchases and the uncertainty of forecasting demand. Christopher and Peck (1997) identify three critical lead times as: *time to market* – how long it takes a company to translate a market opportunity into a product or service; *time to serve* – the time it takes to capture a customer order and deliver the goods or service to the satisfaction of the customer; and lastly, *time to react* – the time it takes to respond to demand volatility by turning on and off the production tap. The adoption of strategies such as quick response supply chain management and mass customization to eliminate excess inventory, low quality, and long lead times and high-performance manufacturing systems that decrease work-in processes in the factory floor can be taken as new challenges for the firms in the fashion industry. Hence, the most important key for the success in the market places is to know the right target market and the right time to provide fashion goods for customers. Thus, the exigency of efficiency and effectiveness of cross border supply network performance mainly depends on substantial awareness of available knowledge, expertise and information on critical factors.

The effectiveness of global supply network means that the challenge is creating and developing long-lasting relationships, in which relationship are closely related to knowledge creation and learning. This means that a firm must acquire new knowledge by entering into relationships with various actors in order to learn. Learning is both a process and outcome, it can be described as the ways firms build, supplement and organize knowledge and routines around their activities and within their cultures, and adopt, and develop organizational efficiency. It is a key factor in achieving capability and sustainability in a volatile market. Therefore this paper will delve on the actors and interaction processes, focusing into the processes of learning and knowledge translation for effectively managing cross border supplier relationships, with particular reference to the 5 Danish firms in the fashion industry.

In this context, the fashion industry is interesting and relevant to this endeavour as it is a huge global business that reflects and pushes cultural and social boundaries. The textile, apparel and footwear industries are what many consider to be elements of a fashion industry. Textiles in the shape of home furnishings, fabrics, curtains, various upholstery, and wall floor coverings are what many consider fashionable items, as indeed are clothing and footwear. However, the term fashion can cover much greater goods; nevertheless, much of the focus for this paper will remain with textile and apparel.

Methodology

This section offers an overview of the research goals, the content and context of the research project.

Research goal

The research was carried out in September- February 2006. The research project aimed at examining the actual process for Danish firms to integrate knowledge creation and learning in

cross border supplier relationships. This broad objective was operationalized through two research questions:

1. What kind of external knowledge are transferable and to what extent?
2. How can firm improve and reduce barriers in knowledge creation and learning in cross border supplier relationships?

The research questions have important implications for the research design and methods as both the theoretical and the empirical research attempts to find answers to the research proposition. The theory is used as a template with which to compare the empirical results of the case study. Thus, the case companies provide an empirically based reflection. The research strategy used in this study is the case study, or multiple case studies. A case study may be defined as a method for studying a complex social phenomenon and is based on an in-depth understanding of this phenomenon. The usefulness of the case study is not that it calculates frequencies, as in more deductive- quantitative methods, but that it illuminates a particular set of decisions, processes or events, asking the why, how and with what result of a contemporary phenomenon. Thorough description and analysis of the phenomenon in its entirety and context. By “in-depth” understanding is meant that the researcher attempts to gain as broad and comprehensive an understanding of the case as possible. By “thorough description and analysis” is meant that the case is closely described, using various data sources combined with first-hand observations which is seen as the best way to appreciate multi-causal complex scenarios (Yin 2004).

Content and context of the research

The main point of this study is to analyse how and the extent to which knowledge and relationship competence is created and managed in Danish Firms through supply networks involving global actors. Knowledge is viewed as context-specific and relational, for which in essence related to human action. Therefore in order to learn from others, firms have to enter into relationships with various actors. The ability of firms to learn from this interaction depends on how such relationships are structured. By focusing on the concrete processes and actors in the structures of production, it becomes possible to analyze how firms can integrate knowledge creation and learning in global supply relationships in a volatile market; this is given that links or networks are established between supplier firms and buyer firm’s actors involved. The argument is that the core capability for the new challenges the firms in the fashion industry is the competence in integrating knowledge creation and learning in managing cross border supplier relationships. Hence, it is relationships that are an important competence. In this sense, competencies can be understood as the emergent properties of social activity, but are not reducible or predictable from it. Thus, the network becomes the focal analytical point of departure in analysing cross border supplier relationships. As the network theory provided the “embeddedness” perspective as an overall understanding of outcomes on the basis of the concrete interaction between actors and the context of their interaction.

Hence, the intention of this study is to examine the actual processes of inter-firm learning– the learning how and the learning why. Learning how involves the transfer and improvement of skills and routines and learning why leads to establishing and maintaining relationships. It is assumed that such knowledge will contribute to firms’ ability to adapt and develop organizational efficiency in maintaining cross border relationships in a market characterized by high volatility; as it provides a particular context, opportunities and restraints to support the firms’ effort to

integrate knowledge creation and learning in cross border supplier relationships. The overall aim of the proposed study is to obtain a better understanding on how firms can integrate knowledge creation and learning in cross border supplier relationships to adapt to changes and improve innovation and social capabilities seen through the lenses of network, knowledge and learning theory, which focus on relational aspect in cross border business interactions.

The empirical research to delve and analyze the above questions will be carried out within structures of production in the fashion industry, focusing primarily on the business exchanges in the process of design and product development. The objective is to develop a framework to empirically operationalise a process of inter-firm learning and knowledge translation mechanism in the less formalized, but close and long-lasting, exchange relationships between supplier firms and buyer firms- business relationships- in business markets.

Data collection

The research conducted case studies based on a small sample size with in-depth interviews, for which a qualitative study was suitable. The data collection was extensive within the chosen area and was both objective and subjective in nature

As this project is a pilot to the intended PhD project, it focuses upon establishing a sample of case companies to perform more profound qualitative multiple case study. The empirical research was explorative, and concentrated upon developing a practical and methodological frame for performing the study, while during the PhD-project the theoretical model will be adjusted as the field research progresses.

Companies which participated in the project as case studies have responded to three basic requirements:

1. The company must participate in inter-organizational cooperation
2. The company must be motivated to strengthening its competitive advantages
3. The company must believe in the idea of inter-organizational learning

The company must be willing to cooperate in the spirit of openness. i.e., the company must be motivated to participate in the field research, and it must show willingness to share knowledge and experiences, both failures and successes.

Theoretical Framework

It is widely acknowledged that through knowledge creation and learning, innovation capability and social capabilities of firm to adapt to change get improved. Since the beginning of the 1990s, a growing amount of literature within organisational studies, industrial economics and economic geography has started to focus on the role of knowledge in firm strategy and performance (Hamel and Prahalad, 1990, Nonaka and Takeuchi 1995; Cantwell & Dunning, 1991; Ghoshal and Bartlett, 1998). The reason for increased emphasis on knowledge and learning as a key resource and important process (Lundvall and Johnson, 1994) is mainly accounted to increased competition, rapid technological development and globalization. This resulted to an increased focused on less tangible dimensions of firm behaviour, such social abilities, routines and practices, organizational structure as factors for competitive advantages.

Hence, it is relationships that are an important competence. In this sense, competencies can be understood as the emergent properties of social activity, but are not reducible or predictable from it. Thus, the network becomes the focal analytical point of departure in analysing cross border supplier relationships. As the network theory provided the “embeddedness” perspective as an overall understanding of outcomes on the basis of the concrete interaction between actors and the context of their interaction. A network can be defined on the basis of two levels of interaction between its members (Yeung, 1994), namely; intra-firm and inter-firm networks. Intra-firm networks refer to relationships within a single firm. This may describe the ownership structure, the decision making process, the organizational form and communication between the various functions and levels in the firm. This dimension is important in relation to the openness of the firm and its ability to innovate and internalise the knowledge. While inter-firm networks refer to relationships between firm, which can take many forms along a continuum between the market and the hierarchy, in which all parts of a final product are produced and coordinated. Network theory emphasises the relational, social and institutional foundations of economic behaviour. Economic activities are consequently regarded as being embedded in networks of interpersonal relations, through which some actors are effectively able to reshape the strategy and activities of other actors in the network. The embeddedness perspective, the activities of specific actors is conceived as being moulded by the social relationships they participate in. As individual actors are part of and embedded in different networks at the level of the firm and the global level, the various geographical dimensions are regarded as being linked through this embeddedness.

Defining knowledge is not an easy task, as different scholars often use the concepts, such as technology, competence, capabilities, and capacity interchangeably at the level of both firm and society. Regarding the concept of firm-level knowledge, it can be understood as an asset of the firm and may appear in the production process both as input, in terms of competence or R&D investment, and an output, in terms of technological or organizational innovations (Lundvall, 1999). A common way to explain and define the concept of knowledge is to distinguish it from other resources. In a similar vein, Nonaka, Toyama & Byosièrè¹ (2001) build on the view that organisations are entities that create knowledge continuously. Knowledge is dynamic because it is created in interactions between individuals within and across organisations. It is human, and its nature is active and subjectively conveyed by commitment and beliefs which are deeply rooted in individuals’ value systems. Knowledge is essentially related to human action and emotion. (Nonaka, Toyama & Byosièrè, 2001)

Knowledge consists of two dimensions, the technical dimension, i.e. know-how, and the cognitive dimension, i.e. the individual’s conception of reality. (Nonaka & Takeuchi, 1995) Changes in the cognitive dimension are the type of changes which cause fundamental changes in action, they may even redirect action, and which broadens and enriches individuals’ conceptions of reality. Cognitive knowledge rests on individuals’ abilities to observe, ask the right questions, and reflect. Structuring the concept of knowledge, two basic distinctions can be made. First, the distinction between tacit and explicit types of knowledge, “[t]acit knowledge is personal, context-specific, and therefore hard to formalise and communicate. Explicit or “codified” knowledge, on the other hand, refers to knowledge that is transmittable in formal, systematic language.” (Nonaka & Takeuchi, 1995 in Rasmussen, 2000) Second is the distinction between individual and social levels of knowledge. Knowledge at the individual level is

¹ Nonaka, Toyama & Byosièrè (2001) assume a dynamic view on learning in which they assert that organisations do not merely process information when they innovate. Rather, they create new information and reshape the environment through interactions with it. An organisation creates knowledge through action and interaction which reshapes the environment and the organisation itself. Organisations question and reconstruct existing perspectives, frameworks, or premises on a daily basis through a continuous process of knowledge creation.

transferable as it moves with the individual. Knowledge at the social level is either publicly available or embedded in the firm's routines, norms and culture. (Rasmussen, 2000) The type of knowledge influences the learning processes since explicit types of knowledge are more easily transferable than tacit types. Tacit knowledge at the social level is embedded in the firm, and this type of knowledge is of special interest in the context of reaping competitive advantage, precisely because it is not available in the market. As for the sharing of explicit knowledge in cross border supplier relationships, explicit knowledge at the social level is most easily accessible in the market. Consequently, the sharing of explicit knowledge at the individual level provides highest importance in terms of development of competitive advantages. Explicit and tacit dimensions of knowledge are complementary, and both are crucial to knowledge creation². Explicit and tacit knowledge interact and interchange in the creative activities of human beings, and the understanding of "this reciprocal relationship is the key to understanding the knowledge-creation process." (Nonaka, Toyama & Byosière, 2001: 494-5) Obviously, knowledge is shared as an interaction between the sender and the receiver. (Rasmussen, 2000)

Knowledge creation is based on the firm's knowledge base. Learning is a creative activity of human beings, and the key is to understand the reciprocal relationship between tacit and explicit knowledge assets. These reciprocal relationships are socialisation, externalisation, combination, and internalisation which take place in a shared space. Socialisation is when tacit knowledge of one person becomes tacit knowledge of another person. Combination is when explicit knowledge is combined with other explicit knowledge. Externalisation is the articulation of tacit knowledge into explicit knowledge; and internalisation is the development of explicit knowledge into implicit knowledge. The knowledge created then becomes part of the firm's knowledge assets and the basis for a new cycle of knowledge creation. Knowledge is created by individuals through interactions. Interaction is the key to organisational knowledge creation, and all members of the organisation are important actors who should work together. (Nonaka, Toyama & Byosière, 2001, p.496)

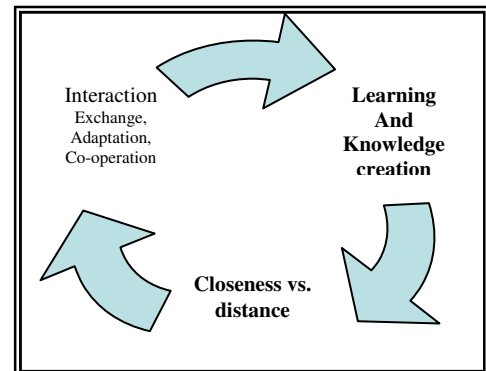
Thus, knowledge is created through the continuous interaction between tacit and explicit knowledge in reciprocal processes of socialisation, externalisation, combination, and internalisation. All four reciprocal processes must be carried through to complete the knowledge creation, and all four reciprocal processes can, in principle, take place in both internal and external interfaces. (Nonaka, Toyama & Byosière, 2001) However, given the special features of cross border buyer-supplier relationships some of the processes are more likely to take place in this type of external interface than others. The foremost learning problem in this type of inter-firm linkage is the transfer of various kinds of information and knowledge between legally and economically independent organisations. Such transfer is seldom contractually regulated, and it involves relinquishing potentially valuable resources. (Lane, C., 2001) Therefore, impediments to openness and reciprocity must be overcome to make knowledge sharing possible. Another problem is that the participating firms have some shared and some opposing goals. The hub firm is in many cases more powerful than the other participants, and it may impose its priorities on supplier firms. However, this use of power precludes the possibility of capturing implicit knowledge and inhibits conceptual learning. (Lane, C., 2001) Therefore, it is most likely that it is primarily explicit knowledge which is shared in inter-firm sourcing linkages, i.e. it is primarily the process of combination (explicit to explicit) which is shared in buyer-supplier linkages, and to a

² Excessive focus on explicit knowledge can easily lead to 'paralysis by analysis', whereas exaggerated valuation of tacit knowledge tends to foster overreliance on past successes. Without experiences, one has difficulty gaining understanding. And unless one goes beyond experiences, universality cannot be achieved. If one does not analytically reflect on experiences, the same things will be repeated over and over, with no increase in the quality of knowledge. ... In this way, tacit knowledge and explicit knowledge interact and interchange with each other in the creative activities of human beings. (Nonaka, Toyama & Byosière, 2001: 494)

less extent, the process of internalisation (explicit to tacit). This latter process is primarily to be found in buyer-supplier linkages characterised by a high degree of quasi-internalised interaction. Given that the complete knowledge creation processes are not fulfilled in the external interface, firms must be attentive to accomplish the knowledge creation in the internal interfaces.

The reciprocal processes of socialisation, externalisation, combination, and internalisation start at the individual level and expand throughout the organisation. Van den Bosch, Volberda, and de Boer (1999) suggest that such spreading happens through systems, coordination, and socialisation. (cf. pp. 146-147). The ability of a firm to share knowledge creation with another firm in an external interface in one or more shared spaces, along with the ability to continue this knowledge creation in internal interfaces is how the firm can derive knowledge and learning in cross border supplier relationships.

The premise of this study is that firms' approach to less formalizes but mutual, long lasting inter-firm networks creates the "reality" of the cooperative relationship and with that, the potential for inter-firm learning and knowledge creation. Thus, the concept of the network is working as the underlying integrating perspective for fusing cross border actors and processes, the different analytical levels, as well as, the various theoretical approaches. This study focuses on the inter-firm supplier networks and embraces the interactions between firms, using interaction model as the primary framework in the research in order to situate learning processes and knowledge creation in cross border supplier relationship.



Network has to be seen as a process in which the 'structure' is not stable but continuously changing and adapting. It is as a consequence, the relational processes have to be interpreted essentially as learning process. In this study learning processes refers to a value creating activity, which upgrades the firm's knowledge base. It is an enduring process that can be stimulated by internal efforts to absorb and upgrade externally derived, as well as internally created, knowledge assets. This study proposes that knowledge base embraces the firm's technological assets of productive, organisational and managerial facilities as well as the knowledge to use, combine and develop these assets; whereas learning can be conceptualized as a knowledge sharing process.

Findings

Broadly, the firms' Knowledge bases and their inter-firm learning efforts are similar. In terms of motivation, all five companies are highly motivated to innovate and to learn, it transpires on the dynamic knowledge capabilities which enable firms to continuously handle changes in the environment although learning from the suppliers are limited in two folds. First, this transpires as 4 case companies' relationships with their suppliers are predominantly arm's-length transactions, primarily for factor cost advantages. This has an impact that even though the relationships with the suppliers have been long-termed, the transfer of knowledge has been limited to an exchange of information concerning orders and the disciplinary effect of quality and safety requirements. One company on the other hand, have made a great effort to assist the suppliers with upgrading when launching a new product, by providing technical knowledge and suggesting requirements so that, in upgrading, suppliers can meet the required standard, quality and price through training and seminars. Furthermore, knowledge is transferred directly in terms of achieving close interaction with the firms' technical staff, although this company express concern that the knowledge created is still limited and wishes for the suppliers' proactive role. Second, the

buyers (Danish Firms) do not achieve additional advantages by sharing their core competitive advantages, i.e. the strategic knowledge about the combination of high-value research, design, sales, marketing, and financial services. On the other hand, rapid changes in production technologies, the fierce competition among the buyers themselves, and their strategies of lean retailing have made it necessary to make more frequent modifications of inputs at all stages of production. Thus, in turn, makes it desirable to base cross border supplier network on long-term consultative linkages.

As I have observed in the case companies, the stability inherent in long-term cross border supplier relationships provides the development of shared spaces in the external interfaces with the suppliers, in all five cases. This confirms the theoretical reasoning that it is primarily the knowledge creation process of combination (explicit to explicit) which is shared in cross border supplier relationship. Due to the limitation of data it is difficult to assess if Company G has succeeded in also improving the organisational structure and upgrading of management capabilities of their suppliers. It is still interesting, though, to note that Company G has taken the initiative to invest in the physical, human and social capital required to become learning organisation.

Conclusion

The aim of providing information about the case companies' inter-firm learning is to preview the companies' interaction with their cross border suppliers and the effect of this interaction on the extent to which knowledge and relationship competence is created and managed in Danish Firms through supply networks involving global actors. However, due to limited time, the present data is too limited to provide further analysis of the effects; i.e. it is impossible to hint at how the transfer and improvement of skills and routines evolves and why learning leads to establishing and maintaining relationships across the mosaic of such individual capabilities. Thus, I cannot hint at how and the extent to which knowledge and relationship competence is created and managed in Danish Firms through supply networks involving global actors. Traditionally, research has focused on firms' internal processes for knowledge creation, integration and sharing, and less attention has been paid to how firms acquire and absorb knowledge from external sources. Although the theoretical framework above has led to clarification of the concepts of knowledge and to understand of the complex nature of learning process, the barriers to learning and the underlying social context need to be reconceptualised in order to explain knowledge creation and learning in cross border supplier relationships in a volatile market. Inter-firm networks which along a continuum between the market and the hierarchy, represents two opposite approaches to inter-organizational cooperation, namely arms-length, competition-oriented cooperation vs. Integration-oriented cooperation. These two opposite approaches to inter-organizational cooperation are described by following characteristics:

Competition-oriented cooperation		Integration-oriented cooperation
Independence	vs.	Mutual dependence
Clear-cut boundaries between the business partners	vs.	Blurred boundaries between the business partners
Business partners are separate business units	vs.	The linkage is the business unit
Conflicting interests	vs.	complementary interests
Own interest isolated	vs.	Own interest associated

These two groups of supplier relationships will be established because they are expected to have different approaches to inter-organizational cooperation and inter-organizational learning. It will be tested whether cross-cutting dynamics underlie inter-firm learning and knowledge translation processes, i.e. which dynamics do not depend on the character of cooperation between firms. However, a firm-level focus must be reintroduced in order to run the risk of falling back on explanations on the territory or cultural dimensions in which the dynamic might be lost. It is clear that the conceptualisation is still too simple and the empiricisms are far too limited for the research to draw any firm conclusions. The core conclusion we can derive at this time is that although the five Danish case firms are highly motivated to innovate and to learn, the knowledge creation and learning in cross border supplier relationships is still limited due to the nature of the relationship. Hence, Firms' approach to inter-organizational cooperation creates the "reality" of the relationship and with that, the potential for inter-organizational learning and knowledge translation.

References

- Christopher, Martin and Peck, Helen, (1997), Managing Logistics in Fashion Markets. The International Journal of Logistics Management, 8 (2)
- Faulkner, David and De Rond, Mark (2000) Cooperative Strategy: Economic, Business, And Organizational Issues. Oxford University Press
- Ford, David (1990), Understanding Business Markets. Academic Press. London.1990
- Håkansson, Håkan and Johansson, Jan (2001), Business Network Learning. Elsevier Science Ltd., Oxford, UK.
- Hines, Tony and Bruce, Margaret (2001). Fashion Marketing. Butterworth-hejnmann, Oxford, UK
- Hamel, Gary and Prahalad, C.K. (1990), The Core Competence of the Corporation. Harvard Business Review 1990 (May-June): 79-91
- Nonaka, Ikujiro and Takeuchi, Hirotaka, (1995) The Knowledge-Creating Company – How Japanese Companies Create the Dynamics of Innovation, Oxford University Press
- Palpacuer, Florence; Peter Gibbon and Lotte Thomsen, (2003) New challenges for developing country suppliers in global clothing chains: A comparative European perspective. Global Value Chain Initiative. Sussex: Institute of Development Studies.
- Senge, Peter (1990), "The Fifth Discipline: The Art and Practice of the Learning Organization, Doubleday, New York
- Szulanski, Gabriel, (1996), Exploring Internal Stickiness: Impediments to the Transfer of Best Practice Within Firm, Strategic Management Journal, 17, Special Issue, Winter, pp. 27-43.
- Van den Bosch, F.A.J, Volberda, H.W. & de Boer, M., 1999: "Coevolution of Firm Absorptive Capacity and Knowledge Environment: Organisational Forms and Combinative Capabilities" in Organisation Science, vol. 10, no. 5, 551-568
- Yin Robert (1994) "Case Study Research: Design and Methods", 2nd edition. California, USA: Sage Publications, Thousand Oaks